

### **REMARKS**

Claims 1-4, 7-10 and 13-23 are currently pending in this application. Claims 1-2, 8-10 and 13-23 stand rejected and claims 4 and 7 are objected to. Claims 1, 7, and 13-17 are amended, support for these amendments can be found, for example, in paragraph [0021] of the specification. Applicants' response to the Examiner's rejection is as follows.

#### **Claim Rejections – 35 USC §112**

Claims 1-4, 7-10 and 13-23 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In response, Applicants have amended the claims as suggested on page 2, paragraph 5 of the Office Action. Applicants respectfully request that the rejection be withdrawn.

#### **Claim Rejections – 35 USC §103**

Claims 1-3 and 13-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shayan (US 6,772,756) in view of Frank et al (US 4,903,850). Applicants respectfully traverse this rejection.

Claim 1, as amended, is directed to a portable vapor inhaler comprising a reservoir and a lid, wherein the lid comprises a central depressed area and a wall around the central depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user's **nose**, and wherein the lid further comprises at least one lid opening, wherein the at least one lid opening is smaller in area than the opening of the reservoir, and wherein the lid is adapted to concentrate a vapor from the reservoir at the user's **nose**".

Shayan, which is directed to an apparatus for the vaporization of materials, does not disclose, teach, or suggest a lid comprising central depressed area and a wall around the central

depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user's nose. In the Shayan device, the vapor that passes through the lid opening is created in a source material holder (22). The vapor flows from the source material holder (22) into a venturi tube receptacle (40). (*See* Col. 7, lines 28-33.) If the source material holder (22) is considered to be a reservoir, then the opening of the reservoir is the opening between the source material holder (22) and the venturi tube receptacle (40). If the venturi tube receptacle (40) is considered to be a reservoir, then the opening of the reservoir is the opening between the venturi tube receptacle and the top (12). (*See* Figs. 2 and 3.) The top (12) of the Shayan device has an opening (11). (Col. 6, lines 50-51.) As can be seen from Figures 1, 2, and 4, the device of Shayan does not disclose, teach, or suggest a lid comprising central depressed area and a wall around the central depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user's nose.

Frank et al, which is directed to a vaporizing device, also fails to disclose, teach, or suggest a lid comprising a central depressed area and a wall around the central depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user's nose. In the Frank et al device, the steam inhaled by a user is created in the steam generating and control section (12). (Col. 5, lines 8-12.) Steam passes from the steam generating and control section (12) to the hood section (14) through openings (102). (*See* Figure 3.) If the steam generating and control section (12) is considered to be a reservoir, then each of the openings (102) is an opening of the reservoir. The Examiner has referred to the hood section (14) as a lid. (*See* Office Action, page 3, paragraph 3.) The hood (14) has an upper margin (140) including a recessed region (142) adjacent to the front of the device, for receiving and/or supporting a portion of the user's jaw/neck. The rear portion of the upper margin includes a recessed section (144) for closely sealing against the bridge of the user's nose. (*See* Figures 1 and 2.)

As can be seen from Figures 1 and 2, the hood of Frank et al is adapted to receive and/or support "a portion of a user's jaw/neck" and to "closely [seal] against the bridge of the user's

nose,” while segments of the upper margin of the hood “extend below the eyes for sealing against the user’s cheekbones.” (Col. 7, lines 52-58.) There is nothing in Frank et al to suggest a lid comprising central depressed area and a wall around the central depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user’s nose. Furthermore, the hood of Frank et al is not adapted to concentrate vapor from the reservoir at the user’s nose. Instead the hood of Frank et al, is adapted such that vapor impinges on the user’s neck, jaw, chin, cheeks, mouth, and nose, without being concentrated at the user’s nose.

Moreover, Shayan in view of Frank et al, does not disclose, teach, or suggest a lid comprising at least one lid opening, wherein the at least one lid opening is smaller in area than the opening of the reservoir. As noted above, the top (12) of the Shayan device has an opening (11). Shayan does not disclose, teach, or suggest that the opening (11) in the top (12) is smaller in area than either the opening between the source material holder (22) and the venturi tube receptacle (40), or the opening between the venturi tube receptacle (40) and the top (12). Therefore, Shayan does not disclose, teach, or suggest the use of a lid comprising a lid opening that is smaller in area than the opening of the reservoir.

Frank et al does not cure the deficiencies of Shayan. According to the Examiner, it would have been an obvious design consideration to reduce the size of the vents (147) so long as the vents were still able to allow ambient air into the lid and to exhaust exhaled air/vapor. Applicants respectfully disagree that it would have been an obvious design consideration to make the vents (147) smaller. Frank et al provides little guidance as to what size the vents (147) should be in relation to the size of the reservoir opening (102). Moreover, the hood of Frank et al is adapted to receive the user’s nose, mouth, chin, jaw, and portions of the user’s cheeks, whereas the device of claim 1 is designed to receive a user’s nose.

As discussed above, Shayan in view of Frank et al fail to disclose, teach, or suggest the all of the elements of claim 1 and therefore claim 1 is unobvious over Shayan in view of Frank et al.

Claims 2 and 3 are both dependent on claim 1 and as such are also not obvious over Shayan in view of Frank et al.

With regard to claims 14-17, the Examiner alleges that the modified device disclosed by Shayan and Frank et al has all of the structural limitations needed to perform the recited method steps and is fully capable of doing so. According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made, upon seeing the modified device, to perform the recited method steps of the instant claims. Applicants respectfully assert that a device made from the combination of Shayan and Frank et al would not have all of the features needed to perform the recited method steps of claims 14-17, as amended. Claims 14-17, as amended, each include the step of "connecting a lid comprising at least one lid opening, wherein each lid opening is smaller in area than the opening of the reservoir, and further comprising a central depressed area and a wall around the central depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user's nose, to the reservoir whereby an amount of humidified air forms in the reservoir and is concentrated by the lid at the user's nose."

As discussed above with regard to claim 1, neither Shayan nor Frank et al, either alone or in combination, discloses, teaches, or suggests a lid comprising "at least one lid opening, wherein each lid opening is smaller in area than the opening of the reservoir." Also as discussed with regard to claim 1, neither Shayan nor Frank et al, either alone or in combination, discloses, teaches, or suggests a lid comprising "a central depressed area and a wall around the central depressed area, said wall comprising a shaped depression, wherein the central depressed area and the shaped depression together conform approximately to a size and shape of a user's nose, and . . . wherein the lid is adapted to concentrate a vapor from the reservoir at the user's nose." Consequently, a device made from the combination of Shayan and Frank et al would not include all of the features necessary to perform the recited method steps of claims 14-17, and it would not have been obvious to one of ordinary skill in the art, upon seeing a device made from the combination of Shayan and Frank et al, to perform the recited method steps.

With regard to claims 19 and 21, the Examiner states the at least one lid opening disclosed by Frank et al can be considered centrally located in the lid. Claim 19 is dependent on claim 1 and claim 21 is dependent on claim 13 and as such are also not obvious over Shayan in view of Frank et al.

With regard to claims 22 and 23, the Examiner states that the at least one lid opening disclosed by Frank et al is located in the central depressed area of the lid because it goes all the way through the wall and into the central depressed area of the lid. Applicants assert that the vents (147) of Frank et al are clearly located on the side/walls of the lid. (See Figure 1) The location of the Frank et al vents is different from the location of the at least one lid openings of claims 22 and 23 which are located on central depressed area of the lid, or as can be seen from Figures 1-3, the bottom of the lid.

In light of the above remarks, Applicants respectfully request that the rejection of claims 1-3 and 13-23 over Shayan in view of Frank et al be reconsidered and withdrawn.

Claim 8 is rejected under 35 U.S.C. §103(a) as being unpatentable over Shayan and Frank et al as applied to claim 1 above, and further in view of Ninkov (US2003/0225003). Applicants respectfully traverse this rejection.

Ninkov discloses therapeutic antimicrobial compositions comprising natural phenolic compounds and essential oil alcohols and methods of their use. According to the Examiner, it would have been obvious to one of ordinary skill in the art to use a polyethylene glycol emulsion in the modified device disclosed by Shayan and Frank et al in order to treat a given infection. Claim 8 depends from claim 1 and as discussed above, Shayan and Frank et al do not disclose, teach, or suggest the invention of claim 1. The teaching of a polyethylene glycol emulsion by Ninkov does not cure the deficiencies of Shayan and Frank et al. Thus, the compositions of Ninkov with the modified device of Shayan and Frank et al fail to disclose, teach, suggest, or render obvious the invention of claim 8. In light of these remarks, Applicants respectfully request that the rejection be reconsidered and withdrawn.

Claims 9 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shayan and Frank et al as applied to claim 1 above, and further in view of Silten (US 2,033,489).

Silten teaches an apparatus for generating vapors. According to the Examiner, it would have been obvious to one of ordinary skill in the art to use the substances including excipients and dyes as taught by Silten in the modified device of Shayan and Frank et al in order to treat various respiratory diseases or to allow a user to see the liquid being vaporized. Claim 9 depends from claim 1 and claim 10 depends from claim 9. As discussed above, Shayan and Frank et al do not disclose, teach, or suggest the invention of claim 1. The teaching of substances with excipients and dyes does not cure the deficiencies of Shayan and Frank et al. Thus, the substances including excipients and dyes taught by Silten with the modified device of Shayan and Frank et al fail to teach, suggest, or render obvious the invention of claims 9 and 10. In light of these remarks, Applicants respectfully request that the rejection be reconsidered and withdrawn.

### **Conclusion**

This reply is intended to further this case to allowance by addressing each ground of objection and rejection in the Examiner's Office Action. Reconsideration of this application is respectfully requested. Authorization is hereby granted to charge any fees which may be required by this paper to Deposit Account No. 19-2570. Should the Examiner have any questions regarding this application, the Examiner is invited to call the undersigned attorney at the number given below.

Respectfully submitted,



Laura K. Madden  
Attorney for Applicants  
Registration No. 48,352

GLAXOSMITHKLINE  
Corporate Intellectual Property UW2220